

REMARKS

Claims 1-48 are pending in the present application. Claims 3 and 48 were cancelled, claims 1-2, 4-7, 9-10, 12-13, 16, 19-20, 22-25, 27-28, 30-31, 34-35, 37-40, 42-43, and 45-47 were amended, and claims 49 and 50 are new. Reconsideration of the claims is respectfully requested.

I. 35 U.S.C. § 102, Anticipation

Claims 1-14, 16, 19-32 and 34-47 stand rejected under 35 U.S.C. 102(a) as being anticipated by Patent No. 6,775,829 to Kroening. This rejection is respectfully traversed.

Regarding claim 1, the office action states,

Kroening discloses the method that covering the steps of a method comprising:

“receiving software requirements (E.g. see FIG. 2, order 208 and associated text) from each of a plurality of users (E.g. see FIG. 2, user 202, 204 206 and associated text)” and

“generating a disk image containing at least one item of software, wherein the at least one item of software complies with at least a subset of the software requirements” (E.g. see FIG. 2 and associated text, e.g. see col. 5:59 to col. 6:50, which states

“... requiring a different driver, software component

It is noted that independent claims 1, 19, and 34 have all been amended in a similar fashion to more clearly recite the differences between the present invention and the art relied on by the examiner in rejecting these claims. Representative claim 1 now recites,

1. (Currently amended) A method for creating customized disk images for loading software onto a computer, the method comprising the steps:
 - receiving software requirements for a given system from a plurality of users;
 - determining (a) a plurality of software components that will fulfill the software requirements while addressing constraints and affinities between said plurality of software components and (b) a respective plurality of configuration options that reflect current best practices with regard to said plurality of software components; and
 - generating a disk image containing said plurality of software components configured according to said respective plurality of configuration options.

This claim now recites several distinctions over the art; both the “receiving” and “determining” steps above reflect differences from the art relied on. For example, the receiving step recites that software requirements can be received from multiple users for a single system, noting,

In Figure 2A are shown users 50, 52 and 54 all presumed to be employees of an enterprise for whom the disk image will be constructed. For example, user 50 may be a manager or owner of the enterprise, user 52 may be the system administrator for information technology for the enterprise, and user 54 may be a representative of the department for which the disk image is being constructed. Each of users 50, 52 and 54 creates some component of the requirements for the disk image ...¹

In contrast, Kroening will receive input from multiple users, but each user is creating their own system, rather than collaborating. The exemplary embodiment states,

In referring to FIG. 2, an exemplary embodiment 200 is shown wherein a logic flow for creating a disk image of a desired software configuration is illustrated. A plurality of users 202, 204 and 206 enter orders for a first information handling system, a second information handling system and up to an "Nth" information handling system. The first information handling system is different from the second information handling system.²

Additionally, the determining step recites that the claimed method of the present invention determines specific software components and configuration options from the requirements received, rather than relying on the user to specify desired components. The specification describes this feature as follows:

It is the intention of this invention to support the customer specification of disk images in terms of the customer's needs, rather than requiring the customer to list each and every software component that will be required in the disk image.³

In contrast, Kroening is asking the user to make specific choices from the options available. One embodiment of Kroening is illustrated in Figure 3B, reproduced here,

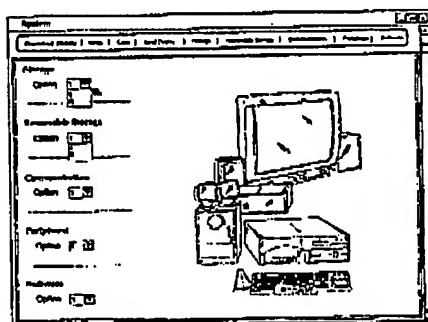


FIG. 3B

In this example, the user is given options that they can select from, using a pull-down menu as shown for storage and removable storage. In discussing this figure, Kroening states,

Referring now to FIGS. 3A, 3B, 3C and 3D, exemplary embodiments of the present invention are shown wherein a plurality of users choose from a plurality of customizable

options for a product. For instance, the consumer, accessing a receiver over a network connection, may select from a plurality of options to configure a desired product, such as an information handling system. The user may utilize data entry screens, such as the examples shown in FIGS. 3A and 3B, to select from a variety of option choices to enter the data into the receiver. By offering a variety of

¹ Application, page 7, line 25 through page 8, line 4

² Kroening, column 5, lines 61-64

³ Application, page 7, lines 14-16

options, a corresponding variety of software configurations must also be offered, such as drivers, hardware setting, desired operational software, and the like.⁴

Not only does the determining step of the presently claimed invention recite that the system selects specific components of software, it also recites that the system determines configuration options that reflect best practices for the software. This is supported in the application by the statement that *"The disk image builder also consults a knowledge base concerning best practices established by the service provider for disk image builds."* Kroening does not appear to disclose checking for such best practices. Rather they appear to leave configuration settings to the user's discretion.

Because of these differences, it is asserted that the claimed invention distinguishes over Kroening. Since claims 2-14, 20-32 and 35-47 depend from claims 1, 19, and 34, the same distinctions between Kroening and the claimed invention in claim 1 also apply to these claims. Additionally, some of the dependent claims recite additional combinations of features not suggested by the reference.

For example, claim 2 recites that *"said determining step applies rules to the software requirements to identify software components that comply with the software requirements"*. This step is part of the system determining specific components. In contrast, Kroening asks the user what software components they want to include.

Claim 5 recites that *"the rules include rules specifying when particular versions of a particular software item are to be utilized"*. Kroening does not appear to discuss making a decision between different versions of a given application.

Claim 13 recites that *"the software requirements can be received in terms of customer needs rather than specific software components"*. In contrast, Kroening expects the user to specify the desired software components.

It is respectfully urged that the rejection of the above claims have been overcome.

In claim 16, the "parsing" and "evaluating" steps were somewhat amended, although the other steps remain the same. This claim recites,

16. (Amended) A method for creating a customized disk image for loading software onto a computer, the method comprising the computer-implemented steps:
- parsing a plurality of inputs regarding a desired system to extract specifications regarding software;
 - evaluating a plurality of rules with respect to the plurality of inputs to derive

⁴ Kroening, column 9, lines 15-27

a set of software components conforming to the specifications;
 evaluating a second plurality of rules with respect to the plurality of inputs to derive a set of configuration options conforming to at least the specifications;
 storing each software component from the set of software components on a storage device;
 configuring each software component stored on the storage device in accordance to the set of configuration options; and
 generating a disk image from contents of the storage device.

Regarding claim 16, the rejection notes,

Kroening teaches a method comprising:

"parsing a plurality of inputs to extract specifications regarding software" (E.g. see FIG. 5, block 508 and associated text);

"evaluating a plurality of rules with respect to the plurality of inputs to derive a set of software items conforming to at least the specifications" (E.g. see FIG. 5, block 510 and FIG. 4 block 406 & 416 and associated text);

"evaluating a second plurality of rules with respect to the plurality of inputs to derive a set of configuration options conforming to at least the specifications" (E.g. see FIG. 4 block 412 & 418 and associated text);

"storing each software item from the set of software items on a storage device" (E.g. see FIG. 2, block 226 and FIG. 4, block 406, 412, 414 and FIG. 5, block 512 and associated text);

"configuring each software item stored on the storage device in accordance to the set of configuration options" (E.g. see FIG. 3A-3D and associated text); and

"generating a disk image from contents of the storage device" (E.g. see FIG. 6 and associated text).

It is submitted that the cited figures and associated text do not disclose the steps of the method claimed in amended claim 16. Figures 4 and 5 of Kroening and their associated text are reproduced below.

Kroening states,

Referring now to FIG. 4, an exemplary embodiment of the present invention is shown wherein a removable medium is suitable for storing and loading at least two different software configurations. A user may request a first information handling system including a variety of options, examples of such options are shown in FIGS. 3A, 3B, 3C and 3D. The first requested information handling system 402 may include a first group of hardware configuration components 404 and a first group of software configuration components 406. An additional user may request a second information handling system. The second requested information handling system 408 may include a second group of hardware configuration components 410 and a second group of software configuration components 412. To further complicate the process, at least one of the hardware or software components of the first information handling system is different from at least one of the hardware and/or software components of the second information handling system. Thus, the configuration for the first desired software configuration is different from the configuration of the second desired software configuration, thereby requiring different software configurations. For example, a different hardware component may require a different driver, and the like.

However, by utilizing the present invention, the software configuration corresponding to the first desired software configuration and the software

configuration corresponding to the second desired software configuration are stored on a removable medium 414. Thus the removable medium may be utilized to install the first desired software configuration on a first requested information handling system 416 and the second desired software configuration on a second information handling system 418. In this way, multiple copies of the same removable medium may be utilized to install different software configurations on different information handling systems without the requirement of matching only one particular medium with one particular system.

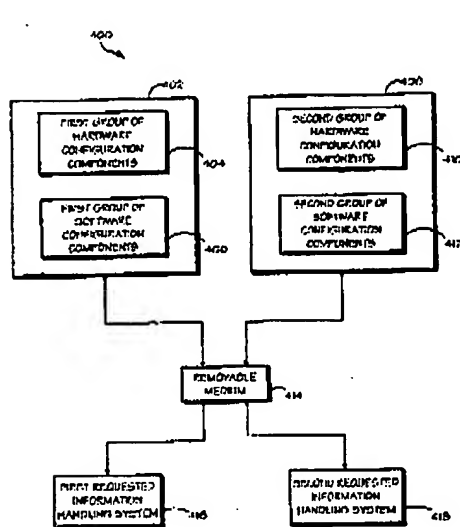


FIG. 4

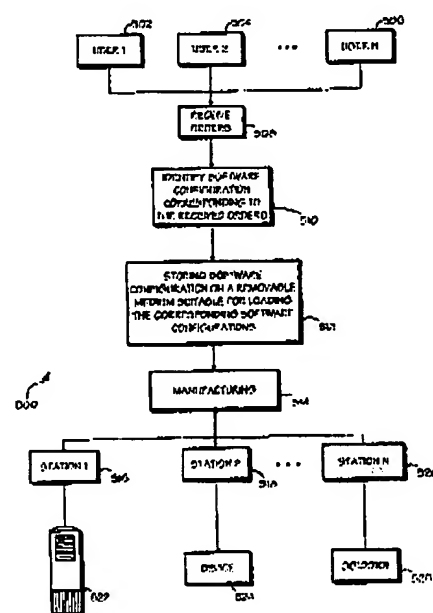


FIG. 5

For example, as shown in FIG. 5, an exemplary embodiment 500 of the present invention is shown wherein a plurality of received orders have a corresponding software configuration identified and stored on a removable medium. Orders from a plurality of users 502, 504 and 506 are received 508. Software configurations corresponding to the received orders are identified 510. The corresponding software configurations are then stored on a removable medium, the removable medium suitable for loading the corresponding software configurations 512. Therefore, when the information handling system is manufactured 514 that corresponds to the received order, software 516 corresponding to the particular system 518 and/or device 520 may be input from the removable medium.⁵

As mentioned earlier, the parsing step has been amended to reflect the fact that a number of users can provide input for a single system. This difference reflects the somewhat different situations in which these two systems and method are used. The presently claimed invention is designed for use in a provisioning system, in which a

⁵ Kroening, column 10, line 34 through column 11, column 16

provisioning center manages the needs of a number of firms, each of which can be large. Input may be needed from department heads, information technology experts, and a person or persons in charge of the overall business. In contrast, Kroening is helping an individual user to set up the configuration of a computer that is being assembled.

Additionally, Kroening does not appear to evaluate a set of rules to derive the software components; rather this patent appears to simply ask the user what they want. Neither does Kroening appear to evaluate a set of rules to derive configuration options, but again to ask the user what they want. It is asserted that these differences between the presently claimed invention and Kroening are patentable.

It is respectfully urged that the rejection of claims 1-14, 16, 19-32 and 34-47 under 35 U.S.C. § 102 has been overcome.

Furthermore, Kroening does not teach, suggest, or give any incentive to make the needed changes to reach the presently claimed invention. Kroening is concerned with putting together a complete system for a user. While there are similarities with the presently claimed invention, there are significant differences. Kroening is directed to creating an entire system according to the specifications of a single user. Absent the examiner pointing out some teaching or incentive to implement system selection of the necessary software according to user requirements, rather than according to specific user choices, one of ordinary skill in the art would not be led to modify Kroening to reach the present invention when the reference is examined as a whole.

II. 35 U.S.C. § 103, Obviousness

Claims 15, 33 and 48 stand rejected under 35 U.S.C. 103(a) as being obvious over Kroening in view of US Patent No. 6,546,419 to Humpleman et al. (hereinafter Humpleman).

Additionally, claims 17-18 stand rejected under 35 U.S.C. 103(a) as being obvious over Kroening in view of US Patent No. 6,854,120 to Lo et al. (hereinafter Lo). These rejections are respectfully traversed.

It is submitted that these claims inherit the allowability of their parent claims. Therefore, the rejection of claims 15, 17-18, 33, and 48 under 35 U.S.C. § 103 has been overcome.

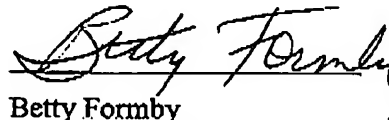
III. Conclusion

It is respectfully urged that the subject application is patentable over Kroening, Humpleman, and Lo and is now in condition for allowance.

The examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,



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